

Psychiatric morbidity in patients referred to an insomnia clinic

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ABSTRACT

Introduction: Insomnia is a common complaint associated with psychiatric disorders. Detection and diagnosis of insomnia can be a challenge at the primary care level. Patients often present with various kinds of psychological symptoms. Therefore, a high index of suspicion and careful assessments are crucial in eliciting signs and symptoms and making an accurate diagnosis of primary insomnia or a psychiatric disorder.

Methods: This study was undertaken at the end of 2005, and is a retrospective review of all patients referred to the Insomnia Clinic and seen by the principal author in a three-year period between 2002 and 2005. Relevant data was collected from the medical records of patients who attended the clinic during this period.

Results: In this study of 141 patients seen at an Insomnia Clinic, 47.5 percent had primary insomnia, while 52.5 percent had a primary diagnosis of a psychiatric disorder. 41.1 percent of those diagnosed with a primary psychiatric disorder had comorbid psychiatric disorders and 4.3 percent had substance abuse problems.

Conclusion: The various psychiatric disorders present in this group of patients highlight the need for careful assessment and recognition of these associations.

Keywords: insomnia, insomnia clinic, psychiatric disorders, sleep disorders.

Singapore Med J 2007; 48(2):163–165

INTRODUCTION

Insomnia is a common subjective complaint and symptom; 10%–15% of the adult population has chronic insomnia and an additional 25%–35% of the population has transient or occasional insomnia.⁽¹⁾ Studies have reported that insomnia secondary to a psychiatric disorder is the most common diagnostic entity in 30%–50% of patients.⁽²⁾

The most frequent occurrence is with anxiety disorders and mood disorders. A National Institute of Mental Health study in the US also revealed that the risk of developing a new major depressive illness or anxiety disorder increased significantly if the insomnia had remained unresolved after a year.⁽³⁾ Insomnia is also concurrent with medical and surgical problems.⁽⁴⁾ Findings from the National Sleep Foundation's Sleep in America Survey 2003 indicated that sleep disturbances and chronic diseases in older adults are frequently comorbid.⁽⁵⁾

A high index of suspicion and careful assessments are crucial in eliciting signs and symptoms and making an accurate diagnosis, as to whether it is primary insomnia or a psychiatric disorder. This is accomplished by a detailed sleep history including the patient's sleep schedule and use of medications, reviewing the patient's general medical history, assessing for psychiatric disorders and when appropriate, investigating further with sleep studies.⁽⁶⁾ Yet assessments for insomnia are often unsatisfactory in part because patients do not always raise the complaint spontaneously. Ancoli-Israel and Roth revealed that among a group of 700 patients consulting physicians, only 5% visited specifically to discuss sleep problems, 69% never discussed it and 26% discussed sleep problems during visits for other purposes.⁽⁷⁾ This study was undertaken to determine the extent of psychiatric and medical comorbidity among patients presenting with sleep complaints at an Insomnia Clinic in a tertiary psychiatric hospital in Singapore.

METHODS

The Insomnia Clinic is a specialist clinic in a tertiary psychiatric hospital and accepts referrals from various sources such as primary care physicians, other specialists and even self-referrals. This study was undertaken at the end of 2005 and is a retrospective review of all patients referred to the Insomnia Clinic and seen by the principal author over a three-year period between 2002 and 2005. Permission was obtained from the Chairman, Medical Board to access the medical records of these patients. The study was approved by the hospital's Clinical Research Committee and the ethical approval was given by the National Healthcare Group's Domain Specific Review Board A. Data was collected from the medical records. All analyses were performed using the Statistical Package for Social Sciences version 13.0 for Windows (SPSS Inc, Chicago, IL, USA). Statistical significance was set

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at $p < 0.05$. Descriptive summary statistics were obtained for various psychological and psychiatric disorders. Chi-square or Fisher's exact tests were used to determine the associations between primary insomnia with length of sleep problems before referral, personality disorders, medical and surgical comorbidity.

RESULTS

Our study group of 141 patients consisted of more females (53.9%) than males (46.1%). 85.8% of them were Chinese, 3.5% were Malay, 6.4% were Indian, and 4.3% were from other ethnicities. Almost two-thirds (61.7%) were married. 47.5% were in the 21–40 year age group, while 38.2% were older than 40 years. 87% had at least secondary education and the majority were either administrative personnel (24.8%) or in sales or clerical jobs (17%).

For all patients, a mental state and physical examination was done. The diagnosis was made according to the Diagnostic and Statistical Manual of Mental Disorders IV (DSM) of the American Psychiatric Association.⁽⁸⁾ 47.5% of the referred cases had primary insomnia. Of those suffering from a primary psychiatric disorder, the most common diagnosis was generalised anxiety disorder (GAD) (14.2%) and obsessive-compulsive disorder (9.9%), followed by major depression/dysthymia (9.9%) (Table I). Those with stress reactions and adjustment disorders were included under "Others".

58 patients (41.1%) who had a diagnosis of a primary psychiatric disorder suffered from comorbid axis I psychiatric disorders, the most common being GAD ($n = 26$, 18.4%). The next most common comorbidity was obsessive-compulsive disorder ($n = 13$, 9.2%), followed by dysthymia/major depression ($n = 12$, 8.5%). From the history and clinical examination, patients were also assessed for axis II personality disorders.⁽⁸⁾ 114 patients (80.9%) had personality disorders, the most common of which was a cluster C personality disorder ($n = 108$, 76.6%). This group comprised personality disorders of the avoidant, dependent, obsessive-compulsive and not otherwise specified types in the DSM. There were five patients (3.5%) with a cluster B personality disorder and only one patient (0.7%) with a cluster A personality disorder (Table II).

Among patients with primary insomnia ($n = 67$), cluster C personality disorder was still the commonest ($n = 52$, 77.6%). There was no significant difference in terms of axis II personality disorders between those with primary insomnia and those with an axis I psychiatric disorder.

The prevalence of medical and surgical problems was relatively low in this study population. Only 43 patients (30.5%) had medical problems, which were mainly

Table I. Axis I diagnosis.

Diagnosis (n = 141)	n (%)
Primary insomnia	67 (47.5)
Generalised anxiety disorder	20 (14.2)
Obsessive-compulsive disorder	14 (9.9)
Major depression/dysthymia	14 (9.9)
Parasomnia	10 (7.1)
Substance A abuse	6 (4.3)
Others	10 (7.1)

Table II. Axis II personality disorders.

Diagnosis	n (%)
Personality disorders	114 (80.9)
Cluster C personality disorder	108 (76.6)
Cluster B personality disorder	5 (3.5)
Cluster A personality disorder	1 (0.7)

hypertension and diabetes mellitus. There were only three patients (2.1%) with surgical problems. There was no significant difference in medical and surgical comorbidity between those patients with a primary insomnia and those with other psychiatric disorders. The prevalence of alcohol and substance abuse was also low in this population. Alcohol abuse was defined as the continued use of alcohol, despite the development of social, legal, or health problems. Substance abuse was broadly defined as the use of illicit drugs, or use of prescription or over-the-counter drugs for purposes other than those for which they are indicated or in a manner or in quantities other than directed.

22 patients (15.6%) had a history of alcohol use, eight patients (5.7%) had a history of prescription drug abuse, mainly benzodiazepines, and six patients (4.3%) had a diagnosis of illicit substance abuse. There were no patients with substance dependence in the study population. There was no significant difference in alcohol or drug abuse between those with primary insomnia and those with axis I psychiatric disorders. 29.6% of patients were referred to the Insomnia Clinic within three months of experiencing sleep problems, while 35.2% patients were referred after one year. There was no significant difference between those with primary insomnia and those with other psychiatric disorders in terms of length of sleep problems before referral to the clinic.

DISCUSSION

Although this study covers a three-year period, the cohort of patients is relatively small ($n = 141$). Gender and age are known to be important demographical variables in the prevalence of insomnia but this was not evident in our study population.⁽⁹⁾ The elderly generally have about 1.5

times higher prevalence rates of sleep problems than those 65 years and younger. Most of our patients were young adults and this could have negated gender bias in the elderly that was found in other studies.⁽¹⁰⁾ Furthermore, the study population is also a select group as they were referred to an Insomnia Clinic in a psychiatric hospital.

Slightly more than half of the patients in this study had a psychiatric disorder. 34% of this group suffered from depressive or anxiety disorders; this is slightly higher than our findings in an earlier study in the nineties. In that study, 29.4% had either depressive or anxiety disorders (depression 17.7%, anxiety disorders 11.8%).⁽¹¹⁾ While the doctors who referred the patients recognised the psychiatric nature of the complaint, they were still unable to recognise the cluster of signs and symptoms to diagnose the psychiatric disorder.

It is important to realise that sleep disturbance is a common diagnostic symptom for mood disorders such as dysthymia and major depression, and in patients with generalised anxiety disorder. In a survey of almost 8,000 people, Ford and Kamerow found that 40% of insomniacs met criteria for psychiatric disorders, with the majority being anxiety disorders and depression.⁽³⁾ Breslau et al also found a strong correlation between lifetime prevalence of sleep problems and psychiatric disorders, with anxiety, depression and substance abuse problems being the most common.⁽¹²⁾

Our data supports the high association of sleep problems with psychiatric disorders, although it is not as high as that found by Buysse et al, who reported that three-quarters or more of patients with insomnia in general medical clinics had a diagnosable psychiatric illness.⁽¹³⁾ There was also high psychiatric comorbidity in those with psychiatric disorders in this study. This could have made recognition and/or detection of psychiatric disorders difficult for the physicians at the primary care level. There are studies that have shown that long-term insomnia may predispose patients to a mood disorder.⁽¹⁴⁾ This is not a likely cause for the high prevalence of psychiatric disorders in our study population, as there was no significant increase in those with a long history of sleep problems before referral.

We found a high prevalence of personality disorders in our study population. Asaad et al reported that sleep profiles in borderline personality disorder (BPD) are different from those of normal subjects; 45% of BPD patients had sleep complaints that included difficulty in falling asleep, interrupted sleep as well as early morning awakenings.⁽¹⁵⁾ Other studies have reported that borderlines were different from normal subjects in various aspects of sleep architecture.⁽¹⁶⁾

Substance and alcohol abuse were not common among our patients, very likely because these conditions were accurately diagnosed and referred to the well-

established Community Addiction Medicine Programme available in the hospital. Apart from a strong association with psychiatric disorders, insomnia is also correlated with medical illnesses. Mellinger et al found that 53% of those with serious insomnia had two or more health problems in contrast to only 24% of those with no trouble sleeping.⁽¹⁷⁾ Furthermore, insomnia is associated with significantly greater disability from medical disorders and increased healthcare utilisation.⁽¹⁸⁾

There was no significant correlation with medical and surgical comorbidity in our study population. A likely reason is that this is a relatively “young” group with the majority of patients in the age group of 21–40 years. In addition, the referral selectivity to a psychiatric hospital could have sent many of those with medical and/or surgical comorbidity to other settings. In summary, insomnia has a number of clinically significant associations, in particular, with psychiatric and medical and/or surgical disorders. Knowledge and heightened awareness are crucial for accurate diagnosis and effective therapy.

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